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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,867	08/08/2008	Aviv Tzidon	P-8939-US	8696

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Pearl Cohen Zedek Latzer, LLP  
1500 Broadway  
12th Floor  
New York, NY 10036

EXAMINER
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VALENTIN, JUAN D

ART UNIT	PAPER NUMBER
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2877

NOTIFICATION DATE	DELIVERY MODE
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10/14/2011

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTO@pczlaw.com  
Arch-USPTO@pczlaw.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/583,867	TZIDON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	JUAN D. VALENTIN II	2877	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2011.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 5) ☒ Claim(s) 40,41,43-49,51,54-59,61-67 and 70-74 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 40,41,43-49,51,54-59,61-67 and 70-74 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 51 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 51 depends from claim 48 which claims that that one beacon generates both beams from the same position. However, in claim 51 applicants have claimed that the one beacon is now two beacons which each emit one beam of the claimed two beams. It is not known how the system can go from one beacon emitting two beams to having two beacons each emitting a single beam. This claim language is indefinite. Applicant is asked to please show in the specification where it clearly discloses how the claimed system can to do both at the same time?

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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2. Claims 40, 41, 43-49, 51, 54-56, 59, 61-67, and 70-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bouzitat et al. (USPN 2,677,820, hereinafter Bouzitat) in view of Alvarez et al. (USPN 2,555,101, hereinafter Alvarez).

With respect to **claim 40**, Bouzitat in conjunction with Figs. 12 and 13 discloses, an automated positioning system for determining an angular deviation of a vehicle 83 from a predetermined path (OX, Fig. 10, col. 14, lines 44-52), using at least one beam sweeping (oscillating) across at least a sector of interest (col. 13, lines 53-62, col. 13, line 70-col. 14, line 2), said beam generated originating from a known position O relative to the predetermined path (col. 11, lines 6-14, col. 13, lines 63-65), the system comprising at least one electro-optical sensor (A, B, C) onboard the vehicle for detecting beams, and a logic circuitry (Fig. 13) on board the vehicle for determining a difference in time of detection of said two beams (col. 14, lines 61-67), the difference in time being indicative of the angular deviation (deviation of the path from desired direction of guidance, col. 13, lines 41-51 and col. 14, lines 44-52) of the vehicle with respect to the predetermined path (col. 10, line 73-col. 14, line 67).

Bouzitat substantially teaches the claimed invention except that it fails to show generating two beams originating from known positions and sweeping the beams back and forth across a sector in synchronization and in opposite directions. Alvarez shows that it is known to provide the use of a single off-board beacon (truck) 3 whose position is known for generating two beams from two beacons each for generating a beam of the two beams and sweeping both of the beams back and forth across a sector in synchronization and opposite one another (**claims 40, 48, 49, and 51**, col. 8, line 18-col. 9, line 11 and col. 10, lines 38-52) for a aircraft control system (col. 15, lines 44-72 and col. 17, lines 59-72). It would have been obvious to one of ordinary

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skill in the art at the time of the claimed invention to combine the aircraft guidance system of Bouzitat with the dual beam beacon aircraft control system of Alvarez for the purposes of producing an indication of the actual position of an aircraft in range, elevation, and azimuth (Alvarez, col. 15, lines 48-66).

With respect to **claim 41**, Bouzitat further discloses wherein the logic circuitry comprises a processor (receiving equipment) (col. 14, lines 17-43).

With respect to **claims 43**, Bouzitat discloses that through the angular deviation from a predetermined path is found through the relation of signals in time (col. 14, 61-62). Which means that as the different aerials receive the emitted beam they are logged into memory and compared to tell when the beams where received. It is an inherent function of this comparison of received signals that the beam scanning direction will be known because the times that each aerial received the beam is logged and compared therefore one would know what direction the beam was scanning. The ability of the logic circuitry to determine this is neither unique nor novel and it would have been obvious for one of ordinary skill in the art to configure the receivers to out put such information as the information is already an inherent part of the functional operation to determine the angular deviation from a predetermined path anyways.

With respect to **claim 44**, Bouzitat further discloses wherein said at least one electro-optical sensor comprises two sensing elements (Fig. 12, A, B, C).

With respect to **claims 45**, Bouzitat discloses the electro optical sensor detects an optical characteristic of a beam (amplitude modulation frequency, col. 14, lines 61-67).

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With respect to **claims 46, 47, and 56**, Official Notice taken. The use of filters, specifically wavelength or polarization filters to encode illumination light in electro-optical vehicle position determination and vehicle guiding systems is well known in the art. It would have been obvious for one of ordinary skill in the art to combine the system of Bouzitat in view of Alvarez with a wavelength or polarization filter for the purposes of providing wavelength labeling/encoding of optical signals from a plurality of beacons in order to determine angular information from the light beam is received from particular beacons.

With respect to **claims 54 and 55**, Bouzitat further discloses wherein the beacon is characterized by an optical characteristic such as modulation frequency (col. 13, line 53-col. 14, line 52) so as to allow determining of azimuth information.

With regard to **claims 59, 61-67, and 70-72**, the method is taught by the functions set forth with regards to the apparatus claims 40, 43-45, 48, 49, 51, and 54-56 respectively, as rejected above over Bouzitat in view of Alvarez.

**3.** Claims 57-58 and 73-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bouzitat in view of Alvarez and further in view of Dyke (USPN 4,700,301 A1).

With respect to **claims 57-58**, Bouzitat in view of Alvarez substantially teaches the claimed invention except that it fails to show controlling maneuvering actuators of a land vehicle. Dyke shows that it is known to provide control of maneuvering actuators (**claim 57**) of a land vehicle (**claim 58**, abstract, col. 3, line 44-col. 4, line 9) for steering agricultural vehicles. It would have been obvious to someone of ordinary skill in the art to combine the device of Bouzitat in view of Alvarez with the land vehicle steering actuation method of Dyke for the

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purposes of providing aircraft navigation path correction for planes which have gone off course from a predetermined path.

With regard to **claims 73-74**, the method is taught by the functions set forth with regards to the apparatus claims 57-58 respectively, as rejected above over Bouzitat in view of Alvarez and further in view of Dyke.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUAN D. VALENTIN II whose telephone number is (571)272-2433. The examiner can normally be reached on Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/GREGORY J TOATLEY/  
Supervisory Patent Examiner, Art Unit 2877

JUAN D VALENTIN II  
Examiner  
Art Unit 2877

/JDVII/  
September 30, 2011